## SAFETY OF THE PUBLIC IN OCEAN TRAVEL

## LETTER

FROM

## THE ACTING SECRETARY OF THE TREASURY.

TRANSMITTING

A report of the Supervising Inspector-General and Board of Supervising Inspectors on resolution of House of Representatives, of January 21, 1896, relative to the safety of the public in ocean travel.

FEBRUARY 10, 1896.—Referred to the Committee on Interstate and Foreign Commerce and ordered to be printed.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. U., February 7, 1896.

SIR: In compliance with a resolution of the House of Representatives, adopted on the 21st day of January, 1896, calling upon this Department "to inform the House of Representatives whether the present provisions for the safety of the public in ocean travel are adequate; and if so, whether such provisions are strictly carried out," I have the honor to transmit herewith a report of the Supervising Inspector-General, and also a report of the Board of Supervising Inspectors, recently in session in this city, to whom the subject of inquiry was referred, such Board having, under the direction of the Secretary of the Treasury, charge of the execution of the laws governing the inspection of steam vessels.

Respectfully, yours,

S. WIKE, Acting Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES, Washington, D. C.

TREASURY DEPARTMENT,
STEAMBOAT-INSPECTION SERVICE,
OFFICE OF THE SUPERVISING INSPECTOR-GENERAL,
Washington, D. C., February 7, 1896.

SIR: I have the honor to transmit herewith a report of the Board of Supervising Inspectors of Steam Vessels, to whom was referred by this

office for consideration a resolution of the House of Representatives directing the Secretary of the Treasury "to inform the House of Representatives whether the present provisions for the safety of the public in ocean travel are adequate; and if so, whether such provisions are strictly carried out."

The provisions of law referred to are contained in section 4488,

Revised Statutes, which reads as follows:

SEC. 4488. Every steamer navigating the ocean, or any lake, bay, or sound of the United States, shall be provided with such numbers of lifeboats, floats, rafts, lifepreservers [line-carrying projectiles and the means of propelling them], and drags, as will best secure the safety of all persons on board such vessel in case of disaster; and every seagoing vessel carrying passengers, and every such vessel navigating any of the Northern or Northwestern lakes, shall have the lifeboats required by law provided with suitable boat-disengaging apparatus, so arranged as to allow such boats to be safely launched while such vessels are under speed or otherwise, and so as to allow such disengaging apparatus to be operated by one person, disengaging both ends of the boat simultaneously from the tackles by which it may be lowered to the water. And the Board of Supervising Inspectors shall fix and determine, by their rules and regulations, the kind of lifeboats, floats, rafts, life-preservers [line-carrying projectiles and the means of propelling them], and drags that shall be used on such vessels, and also the kind and capacity of pumps or other appliances for freeing the steamer from water in case of heavy leakage, the capacity of such pumps or appliances being suited to the navigation in which the steamer is employed.

Referring thereto, it is the opinion of this office that such provisions are entirely adequate, and in the absence of specific complaints to the contrary—and there have been none received by this office—I should assume that such provisions are strictly carried out. This is further confirmed from the fact that an examination of the records of American ocean steamers fails to show a single case of loss of life through lack of the equipments required by law, except in cases where such equipments have been lost or rendered useless at the time of the disaster, as, for instance, in the case of the foundering of the steamer Vera Cruz, August 28, 1880, when the ship encountered a hurricane, the first effects of which were that a tremendous sea swept the decks, carrying away deck houses, lifeboats, and every movable thing on deck, besides sweeping overboard the captain and several of the officers and crew of the steamer, which foundered an hour and a half later, causing the loss of life of 68 out of the total of 78 persons on board, the 10 that were saved having been washed ashore on spars and other wreckage of the steamer. this casualty showing that there are dangers of the sea that no human foresight can provide against, at least in auxiliary life-saving equipments independent of the ship itself, upon which mainly must depend the lives of those who make an ocean voyage, and such safety is now as nearly assured as possible in the modern-built steel and iron steamers. with their numerous water-tight compartments making them nearly nonsinkable, as illustrated in the case of two large transatlantic steamers within the last two or three years, one a German steamer, the other then under the English flag, but now sailing under the American flag, the first safely concluding her voyage with the after compartment of the steamer full of water, the other with one of her middle compartments full of water.

Samples of such modern-built steamers are the *St. Louis* and the *St. Paul* of the American Line steamers, which are each capable, under the navigation laws, to comfortably provide for the accommodation of from 2,000 to 2,500 passengers and crew, though at present they are licensed to carry only 1,200 passengers and 388 crew, or a total of 1,588 persons; and each is equipped with 1,600 life-preservers, 14 boats, and 7 rafts, the boat and raft equipment occupying a space thereon of about 24 feet wide the whole length, of about 225 feet, of the hurri-

cane deck, the only available place where they can be carried with safety and at the same time be accessible in time of emergency, the remaining space on such deck being absolutely necessary for free passage of the crew in the necessary working of the ship. The boat and raft capacity carried would be sufficient, according to the rating of the Board of Supervising Inspectors, for 910 persons in rough water and

about 1.150 in smooth water.

In view of the fact, as absolutely proved in past experience, that in the case of danger to the ship arising from a heavy gale of wind these boats and rafts would be swept overboard long before the ship itself would suffer, this office does not feel warranted in recommending legislation to restrict these or other similar ships to the carriage of only so many persons, passengers, and crew as shall only equal the carrying capacity of the lifeboats and rafts they can practically carry and make available.

It is feared that such legislation might discourage the efforts of builders and owners to adopt the improvements in construction herein referred to, thereby legally debarring them from successful competition with the ships of other nations, none of which are or are liable to be better equipped with auxiliary life saving appliances than are now the

ocean and coastwise steamers of the United States.

In conclusion, and for the information and possible relief of mind of timid persons who fear to make an ocean voyage, or if they do so, and while on board a steamer, are in constant trepidation, to the discomfort of themselves and their associates on such a voyage, I submit a comparative statement of the dangers by land and sea, as shown by official records on the subject, showing that as a rule life is safer to-day on an ocean steamer than when traveling by railroad or any other vehicular mode of travel; in fact, safer than is pedestrian travel in large cities, or while engaged in the ordinary employments of life on land. For instance, in the twenty years ending June 30, 1895, there were reported 100 ocean and coastwise steamers lost. Total number of lives lost, 776, or an average loss per annum of less than 39 persons, while on the railroads of the United States during the five years ended June 30, 1894, there were killed, as reported by the Interstate Commerce Commission, 34,304 persons, including passengers and employees, or an annual average of 6,861 persons killed.

There are no statistics in this country, that I am aware of, from which data can be obtained as to the number of people killed in general employments, but I am informed that Germany keeps a record of all accidental loss of life among workmen, and I have seen an apparently authentic statement in a newspaper lately that the German records show a loss of life from accidental causes of 39,000 workmen from October 1, 1885, to December 31, 1893, a period of eight years and three months, or an annual average of 4,727 such persons, which annual average is over six times the number of persons, passengers, and

employees lost on ocean steam vessels in twenty years.

While the above statements show that there is no absolute preventive against accidental loss of life, either on land or water, they also show that the United States, by its beneficent laws and faithful execution thereof by its duly appointed officers, has reduced the losses of life on steam vessels to a minimum not reached by any other maritime nation.

Respectfully, yours,

JAS. A. DUMONT, Supervising Inspector-General.

TREASURY DEPARTMENT, BOARD OF SUPERVISING INSPECTORS OF STEAM VESSELS, Washington, D. C., January 27, 1896.

The committee on life-saving appliances having had under consideration the resolution of the House of Representatives presented to the Board by the Supervising Inspector-General on the 23d day of January, 1896, relating to equipments on ocean steam vessels, namely, lifeboats, boat-detaching apparatus, etc., beg leave to report as follows:

First. That said resolution reads as follows:

"Whereas it has been repeatedly charged by the Buffalo Evening News and other leading papers that ocean steamers are permitted to sail from American ports with lifeboat equipment utterly inadequate to accommodate the crew and passengers in case of accident; and

"Whereas it is further alleged in these same journals that lifeboats are frequently without the detaching hooks of the disengaging apparatus required by law: Now,

"Resolved, That the Secretary of the Treasury be directed to inform the House of Representatives whether the present provisions for the safety of the public in ocean travel are adequate; and, if so, whether such provisions are strictly carried out.

"A. McDowell, Clerk."

We have the honor to report thereon that, inasmuch as your committee has not been furnished with copies of the newspaper charges referred to in the preamble of the above resolution, we are totally unprepared to make other reply than to state it as their belief that all ocean steam vessels carrying passengers from ports of the United States, both domestic and foreign, never leave port without the life-saving equipments required by the Board of Supervising Inspectors, acting under the authority conferred upon them by the provisions of section 4488, Revised Statutes, which rules are, for steam vessels of the United States, as follows:

"12. Passenger steamers navigating oceans, northwestern lakes, bays, and sounds of the United States must be equipped with lifeboats in proportion to their tonnage,

as follows:

Steamers—	Boats
Under 100 tons	
Between 100 and 200 tons	
Between 200 and 300 tons	
Between 300 and 400 tons	
Between 400 and 500 tons	
Between 500 and 1,000 tons	
Between 1,000 and 1,500 tons	
Between 1,500 and 2,000 tons	
Between 2,000 and 2,500 tons	
Between 2,500 and 3,000 tons	
Between 3,000 and 3,500 tons	
Between 3,500 and 4,000 tons	1
Between 4,000 and 5,000 tons	
Of 5,000 tons and above	

"All these boats must be of proper size and substantially built with reference to the trade in which the steamer is engaged: Provided, however, That no steamer shall be required to have more lifeboats than sufficient to carry the passengers she is allowed by her certificate of inspection, together with her officers and crew.

"13. A portion of the lifeboats required on all passenger steamers may be substituted by their equivalents in approved life rafts when, in the judgment of the inspectors, it can be done with safety.

114. All steamers built for the navigation of oceans, Northwestern lakes, and sounds (meaning in waters sufficiently rough to swamp boats) shall be equipped with

life rafts in proportion of one at least to every two lifeboats required.'

When the above rules were adopted, and up to the adjournment of the Board of Supervising Inspectors at their last annual session, in January last, the largest steamers flying the United States flag did not materially exceed the highest tonnage in the above-enumerated list. Since then two United States merchant steamers have been built, namely, the St. Louis and St. Paul, which steamers are of nearly or quite 11,000 gross tons and 6,000 net tons. To meet this additional tonnage the rules of the Board have been amended, at the present session of the Board, by the addition of the following rule:

"Steam vessels above 5,000 tons burden shall be furnished with an additional boat of not less than 495 cubic feet capacity for each additional 500 tons burden or fraction thereof; or, if the owners or agents prefer, two boats may be used, provided the aggre-

gate capacity shall be the same as the one boat described."

The gross tonnage is always considered in equipping steamers with lifeboats. The rule for foreign steamers under the United States laws, and the rule of the Secretary of the Treasury thereon, is as follows:

"RULE 9. Steamers must be provided with boats in accordance with the following

table:

Table of dimensions of boats required to be carried by foreign passenger steamers, [British Board of Trade rule.]

Number of tons register.	Number of boats.	
1,000 and upward	64444433311	Cubic feet. 2, 034.: 1, 132. 987. 882. 657. 454 368. 91

"Steamers above 1.500 tons burden to be furnished with an additional boat of not less than 495 cubic feet capacity for each additional 500 tons burden or fraction thereof; or if the owners or agents prefer, two boats may be used, provided the aggregate capacity shall be the same as the one boat described."

In the case of foreign steam vessels, over which there is lawful control only on the outward voyage, and not on the inward one, it is believed that, as a rule, there is boat equipment enough for all on board, as the emigrant trade from ports of the United States is nominal only. In the case of either domestic or foreign steamers your committee believe that the existing regulations require all the boats that can be cared for on shipboard without obstructing the safe navigation of the vessel. In this connection must also be considered the fact that modern iron and steel steamships, with their numerous water-tight bulkheads, are at least 100 per cent safer than

were the steamships of twenty years ago.

In view of the difficulty of safely carrying more boats than required by the rules the only remedy in cases where the ship's passenger-carrying capacity is greater than the safe boat-carrying capacity would be to restrict the number of passengers to the capacity of the boats they can carry without detriment to safe working of the ship; but as such restriction upon commerce could not be sustained by this Board without the active support of Congress it is suggested that if Congress desires such restriction it will express the same by an amendment to section 4488, Revised Statutes, making it obligatory upon the steam vessels referred to in that statute to carry no greater number of passengers and crew than they have lifeboat capacity for, and also to request other nations—and all maritime nations have boat rules approximating those of the United States-to join in such restriction, as at least 95 per cent of all passengers coming to the United States from Europe come by foreign steam vessels, and a majority of the cabin passengers carried thereon being citizens of the United

Before concluding this branch of the subject your committee would call attention to the fact that in addition to the boat equipment required, as heretofore referred to, all steamers are compelled to furnish a life-preserver for each and every person on

board, including the passengers and crew of the vessel.

In answer to the newspaper allegation in the resolution of the House of Representatives "that lifeboats are frequently without the detaching hooks of the disengaging apparatus required by law," your committee are at a loss to comprehend exactly what is meant, but assume that what was intended to be said was that lifeboats are frequently not furnished (to quote the exact language of the law, section 4488, Revised Statutes) "with suitable boat-disengaging apparatus, so arranged as to allow such boats (lifeboats) to be safely launched while such vessels are under speed or otherwise, and so as to allow such disengaging apparatus to be operated by one person, disengaging both ends of the boat simultaneously from the tackles by which it may be lowered to the water."

If our assumption in this respect is correct, we would report that the allegation is mostly true, for, though all boats are furnished with suitable hooks and disengaging apparatus, practically complying with the terms of the law, they are not furnished with the technically lawful disengaging apparatus, for the reason that no disengaging apparatus has yet been constructed that will allow a boat "to be safely launched while such [steam] vessels are under speed," whilst there are probably many such that will safely launch a boat with the steamer not under headway.

After the law was passed, February 28, 1871, requiring such impracticable apparatus as it does, a number of them were approved by this Board, and put in use on steam vessels; but two or three years' experience proved those that had been approved not only worthless, but dangerous to life, and, in consequence thereof, the Board at its meeting held January 31, 1873 (p. 33, Proceedings of 1873), rescinded the approval of all such apparatus, in the following preamble and resolution:

"Whereas the experience of this Board is against the use of the disengaging

apparatus heretofore approved and used as a life-saving instrument; and "Whereas, in accordance with the provisions in the second subdivision of the eleventh section of the act of February 28, 1871 (now section 4488, Revised Statutes), requiring this Board to approve all kinds of instruments, machines, or equipments, for the better security of life, required by that act, presupposes that the right resides in this Board to condemn and disapprove all such instruments, etc., as do not accomplish their objects: Therefore,

"Be it resolved, That all the action of this Board heretofore approving of and regu-

lating all kinds of boat-disengaging apparatus be, and is hereby, repealed."

Since the date of the action of the Board as above quoted, the Board has at each succeeding annual meeting had occasion to examine and experiment with various designs of disengaging apparatus, but has failed as yet to find one that would comply with that provision of the law heretofore referred to as being impracticable and, in the opinion of your committee, impossible; the last experiment being with one claimed to be the best ever invented yet, which on a practical trial failed to operate four times out of six trials, thereby proving that any dependence that may be placed on such disengaging apparatus is so purely a matter of chance as to almost constitute Its compulsory use a crime.

Following is a verbatim report of the committee who witnessed the experiments

referred to:

"The committee on life-saving appliances, having had under consideration the communication of Lieut. Lucien Young, presented to the Board by the Supervising Inspector-General on the 18th day of January, 1894, relating to a boat-detaching

apparatus, beg leave to report as follows:

"That on Saturday, January 27, your committee, on invitation of Mr. Young, proceeded to the Potomac River to witness a test of the above-named apparatus, but were informed that they were not ready to make the test. On February 3, the following Saturday, however, six tests were witnessed by the committee from United States steam tug Triton, four of which were unsuccessful, and your committee ask to be discharged from further consideration of the matter.

"ALEX. MCMASTER, "GEO. H. STARBUCK, "C. H. WESTCOTT, " Committee."

## (Proceedings 1894, p. 48.)

In conclusion, your committee would earnestly recommend that section 4488, Revised Statutes, be amended by striking out in said statute all the words following the word "apparatus," in the first paragraph of said section, thus leaving to the Board of Supervising Inspectors discretion to approve any disengaging apparatus that in their judgment is safe as well as practicable.

All of which is respectfully submitted for the consideration of the Board.

E. P. CHANCELLOR, M. J. GALVIN, W. H. MURDAUGH, Committee on Life-Saving Appliances.

On motion the report of the committee was adopted by the unanimous vote of the Board.

Attest:

JAMES N. THOMPSON. Supervising Inspector, Sixth District, Secretary. JAS. A. DUMONT

Supervising Inspector-General, President of the Board.